UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,552	08/16/2006	Giovanni Ghigo	09952.0069	8465

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EXAMINER
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ART UNIT	PAPER NUMBER
2431	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)
	10/589,552	GHIGO ET AL.
	Examiner	Art Unit	
	BRYAN WRIGHT	2431	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>28 December 2009</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

      Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a)☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b)☐ They raise the issue of new matter (see NOTE below);

   (c)☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.

      NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: <u>19-36</u>.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

   See Note:.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/BRYAN WRIGHT/
Examiner, Art Unit 2431

/Syed Zia/
Primary Examiner, Art Unit 2431

Note: With regards to applicant's comments of "…"entropy generator" of Carlson as supposedly corresponding to the claimed "true random number generator" and the "linear feedback shift register (LFSR) 1, of Carlson to correspond to the claimed "pseudo-random number generator", the Examiner respectfully submits the assertion made by the Examiner that applicant's "true random number" is equivalent to prior art reference Carlson's "entropy generator" is indeed a correct assertion. The Examiner contends well known in the art at the time of applicant's original filing was the fact that a "true random generator" incorporates entropy to produce a true random number. The Examiner respectfully submits for purpose establishing a factual basis for the Examiner assertion, the respectfully draws applicant's attention to the teachings of Gudmundsson (US Patent Publication No. 2006/0236400) paragraph 34. In it Gudmundsson discloses the fact that the term "true random number generator" refers to a device that generates a true random numbers, typically by sampling and processing a source of entropy outside the device. The entropy source can, e.g., be a radioactive source, atmospheric noise from a radio or lava lamps. The Examiner respectfully submits that both a "entropy generator" and a "true random number" are equivalent.

Additionally, the Examiner respectfully submits that the Examiner's assertion that the Carlson LFSR is equivalent to applicant's "pseudo random number generator" is indeed correct and is well known in the art. The Examiner cites Gallup et al (US Patent No. 5,258,936) column 1, lines 30-40 as a factual basis for the Examiner's for the purpose of this discussion. Gallup discloses that a "pseudo random number generator" is a LFSR.

The Examiner contends these elements (e.g., entropy and LFSR) as they pertain to applicant's claim limitation are combined to work in a manner for which allows the capability to generate a true random number to be subsequently used as a seed value. See Carlson.

With regards to applicant's remarks suggesting the lack of properly resolving the Graham factual inquiries, the proper resolution of which is the requirement for establishing a framework for an objective obviousness analysis, Examiner contends that both prior arts as cited are within the scope of applicant's claimed invention and that both arts in combination allow for an enhance (e.g. truly random thru the use of entropy) random number generation process.

With regards to applicant statement of, "the random seed recited in claim 19 is generated by the true random number generator, and is not a "product [] of applicant's mixing function" as alleged by the Final Office Action. Id. In addition, Applicant respectfully notes that claim 19 recites a "mixing logic" rather than a "mixing function." Further, Applicant respectfully traverses the Final Office Action's mischaracterization of the claimed "mixing logic" for at least the following reasons. 1 The Final Office Action reads "a Left Shift Register." Final Office Action, p. 3. However, Applicant respectfully submits that there is no such term used in Carlson. Applicant reasonably believes that this is a typographical error of "a Linear Feedback Shift Register", the Examiner contends Carlson paragraph 20 describes a LFSR and what a LFSR comprises of. See Carlson.

With regards of applicant's remarks of, "said mixing logic comprising a generator of an alteration signal intended to change the behavior of said pseudo random number generator" and "said generator of the alteration signal being connected so as to receive said seed and generate said alteration signal by processing said seed by means of the sequence generated by said pseudo-random number generator" (emphases added). The Final Office Action alleges that Carlson teaches these elements. See Final Office Action, p. 4. This is also incorrect. The Final Office Action appears to consider the "mixing function 152" of Carlson as supposedly corresponding to the claimed "mixing logic." See Final Office Action, p. 3. However, Carlson at best teaches that the "mixing function 152" receives "entropy bits generated by entropy generator 101 [to generate a "robust random number"]", the Examiner contends Carlson teaches a mixing function per paragraph 29. Additionally, the process of changing the behavior of a pseudo random generation sequence by way of a seed value is disclosed by Crouch figure 6.

With regards to applicant's remarks of "There is no teaching or suggestion in Carlson to process a seed "by means of the sequence generated by said pseudo-random number generator" to "generate [an] alteration signal" so as "to change the behavior of said pseudo random number generator," as recited in claim 19 (emphases added)", the Examiner applicant's claim 19 as argued reads different then as claim. As claimed applicant claim 19 reads: "a mixing logic connected between said true random number generator and said pseudo-random number generator and arranged to alter the behavior of said pseudo-random number generator by using the random seed", the Examiner respectfully submits Carlson teaches generating a seed value such that the seed value is a random number generated by an "entropy generator" and mixing logic. Crouch as cited teaches the ability of receiving a seed value to alter the behavior of a pseudo-random number generation sequence. Refer to Crouch figure. 6.

With regards to applicant's statement of, "Crouch fails to cure the deficiencies of Carlson. The Final Office Action admits that "Carlson does not expressly teach the claim [] element of a pseudo-random generator," but asserts that Crouch teaches "the use of a pseudo-random number generator [to] provide the capability to create a random number using a pseudo-random generator." Final Office Action, p. 4. Even if this assertion is correct, to which Applicant does not concede, Crouch nevertheless fails to teach or suggest the claim features quoted and discussed above, and thus does not cure the deficiencies of Carlson", the Examiner contends Carlson teaches generating a seed value such that the seed value is a random number generated by an "entropy generator" and mixing logic. Crouch as cited teaches the ability of receiving a seed value to alter the behavior of a pseudo-random number generation sequence. Refer to Crouch figure. 6.

With regards to applicant remarks pertaining to Crouch ability to generate a random number, the Examiner respectfully submits figure 6 of Crouch describes such capability.

With regards to applicant's remark concerning consideration of the patentable weight pertaining to the subject matter comprising applicant's claimed mixing logic, the Examiner respectfully submits, as indicated in the office action the teaching of Carlson discloses the use of a mixing function relative to a true random number generation process. Refer to Carlson paragraph 29.